



**safety**

**is**



**everybody's**

**business**





# Aviation safety . . .

---

Commercial aviation has become as safe as other forms of public transportation. Air accidents are comparatively few in number, averaging 22 a year over the past decade. Looking at them in this perspective, the over-all record as seen against the growing number of passengers and expanding traffic is such that a scheduled airliner's chances of being involved in a crash are one in 500 000 flights. Flying in a modern aircraft is ten times as safe as flying in a piston engine aircraft of the 1950s. For the more than 850 million people flying each year on scheduled flights and millions more on charter flights, the most perilous part of their journey is the car ride to the airport.

The busiest air routes in fact may also be among the safest. Since the end of the Second World War, when transatlantic flying began to develop rapidly, it is estimated that airlines have made some 2.5 million separate flights across the North Atlantic, carrying over 250 million passengers.

This remarkable record has been achieved by a meticulous attention to safety by aircraft designers and manufacturers, airlines, regulatory authorities, governments and international aviation organizations. The fundamental principle underlying every aspect of airline operations is to achieve the maximum possible safety.

Knowing the safety record of air transportation, the passenger's mind has turned to personal convenience and comfort with hardly a thought to essential rules and procedures. Minimum standards for runways and taxiways, air traffic control services, weather and flight information, the passenger knows, are being taken care of along with the rules of the air, telecommunications, airport screening of passengers and everything else required to make international air transportation operate safely and efficiently.

Aviation safety depends on thousands of human decisions involving the design, construction, maintenance and operation of the aircraft, the alertness of air traffic controllers and pilots, the vigilance of cabin attendants and finally the behaviour of passengers in following airline rules on smoking, the use of seat-belts and the carriage aboard of unwieldy or prohibited luggage. *Safety is everybody's business.*

- To make laws and enforce them are duties of national governments. But who will co-ordinate their actions to ensure minimum universal standards and uniformity? ICAO was designated to do that when it was created in Chicago in 1944 through the Convention on International Civil Aviation. It was then decided to establish Annexes to the Convention, which would contain Standards and Recommended Practices covering the whole spectrum of aviation. At present, there are eighteen such Annexes which aim to achieve maximum international standardization for the operation of safe, regular and efficient air services.

- Air travel cannot do without pilots and other air and ground personnel. Their competence, skills and training will remain the essential guarantee for efficient and safe operations. ICAO provides the international guidelines for the licensing of flight crew members (pilots, navigators, flight engineers), air traffic controllers, and maintenance technicians. ICAO manuals provide guidance to States for the training of these and other aviation personnel such as aerodrome emergency crews, flight operations officers and radio operators.

- Every type of transport has its own rules: maritime, road and rail, but for aviation the establishment of and adherence to rules of operation are of special importance because of the three-dimensional environment in which its traffic moves and because aircraft regularly cross international borders and oceans. ICAO ensures that the rules of the air established by each government are the same or compatible world-wide.



## . . . and the role . . .

- Mankind has not found a way as yet to control the weather but ICAO has done the next best thing and developed a number of regulations under the title *Meteorological Service for International Air Navigation*. As a result, all who are concerned with international aircraft operations can be furnished with up-to-date and standardized meteorological information.

- The world of aviation, which by its very nature knows no geographical or political boundaries, requires maps that are unlike those used in ground transportation. The pilot, before he takes off, wants to know what to expect on his route. For safe flying, he must rely on aeronautical charts drawn to accepted ICAO Standards.

- Operational rules and regulations normally cover a wide variety of aircraft ranging from supersonic and subsonic commercial airliners to one-seat gliders, all of which may cross national boundaries into adjacent States. Rules on aircraft operations make it possible for States to facilitate the safe passage over their territories of aircraft belonging to other countries.

- What makes a car roadworthy, a ship seaworthy, an aircraft airworthy? Generally speaking, its design, construction and maintenance do. But who decides in the first place whether or not an aeroplane is airworthy? It is the State in which it is registered. ICAO rules assure compatibility between States in this respect, enabling each country to permit aeroplanes from other countries entry into its territory as long as they conform to ICAO International Standards.

- Air transport operations, to be safe and efficient, depend on reliable aeronautical ground support services. The information needed by a pilot for flight planning must be updated continually. To operate safely and navigate accurately, pilots must have efficient air-ground communications and reliable navigational guidance. This is provided by national authorities and standardized world-wide by ICAO.

- Control of air traffic was almost unknown in 1944. Today, air traffic services are indispensable in providing orderly, safe and efficient flow of traffic whether in flight or on the ground. Air traffic services units are also called upon to provide advice and information for the safe and efficient conduct of flights, and to give the alert when an aircraft is missing or believed to be in distress.

- Prompted by the need to rapidly locate survivors of aircraft accidents, a set of international rules for search and rescue operations has been adopted. These are complemented by the *Search and Rescue Manual* which provides guidelines to ICAO Member States.

- In spite of all efforts, some accidents still occur. The causes of aircraft accidents must be rapidly identified to prevent similar occurrences. ICAO provides guidelines for the conduct of accident investigations and as a complement has introduced a computer system, known as ADREP, which allows its Member States to benefit from the exchange of accident information.

- ICAO also closely monitors national research projects such as those aimed at making aircraft cabins safer by the use of improved structures, restraining equipment and fire-blocking material for seats, as well as other promising developments which might be applied world-wide.

- ICAO currently lists some 16 000 public airports in the world including more than 1 000 serving international traffic. The need for standardization therefore is obvious. A pilot must have the assurance that runway markings are the same at each airport, that runways are designated in the same manner and that runway and taxiway lights are positioned and coloured in identical ways. Standardized specifications also cover the provision of rescue and fire fighting equipment and



services, emergency access roads, equipment, maintenance of runways, taxiways, aprons, visual aids and ways of dealing with bird hazards.

- Since the late 1960s, unlawful seizures of aircraft have posed a continuing threat to aviation. The so-called ICAO "hijacking" conventions have established an international legal system under which offenders can no longer find refuge in any country. These conventions, which are now ratified by more than 120 States, along with stringent security practices at airports, have helped to counteract and prevent hijackings. However, as in the case of any criminal act, the law provides only a deterrent. Security precautions with respect to airports can never be totally foolproof in the face of human error or lack of vigilance and must therefore be constantly in effect.

- More than half of the world cargo carried by all modes of transport is potentially dangerous: explosive, corrosive, flammable, toxic or radioactive in nature. Transport of these dangerous goods is essential for a wide variety of global industrial, commercial, social and medical requirements and processes. Because of the advantages of air transport, a considerable amount of dangerous cargo is carried by aircraft. ICAO's detailed rules and instructions ensure that such cargo is carried safely.

- While the major technical and regulatory requirements for safe and efficient travel have been met, ICAO must ensure that its Standards are constantly updated to meet technological advances and that they are applied and implemented world-wide. ICAO's ultimate objective is to achieve a complete world-wide network of facilities and services — installed and operated in accordance with approved standards, practices and procedures — so that the constantly growing number of passengers can travel under the best possible conditions of safety and reliability.

#### SAFETY TIPS

- If your cabin luggage won't fit under the seat or in the overhead bin, don't take it on board.
- The carriage of matches in checked luggage is illegal, as is the carriage of a number of other potentially dangerous goods, such as fireworks, lighter fuel, corrosive acids, gas cylinders and mercury thermometers.
- Read the safety instructions contained in the pocket of your seat and listen to the pre-flight briefing and life-jacket demonstration by the cabin crew.
- Observe the *no smoking* and seat-belt signs.
- Always comply with the crew's instructions.



Public Information Office  
International Civil Aviation Organization  
1000 Sherbrooke Street West  
Montreal, Quebec, Canada  
H3A 2R2

11/85, E/P1/6000  
Order No. 994323

NOT FOR SALE



EXLIBRIS Scan Digit



The Doctor

<http://thedoctorwho1967.blogspot.com.ar/>

<http://el1900.blogspot.com.ar/>

<http://librosrevistasinteresesanexo.blogspot.com.ar/>

<https://labibliotecadeldrmureau.blogspot.com/>



PAR AVION - AIR MAIL





1000 SHERBROOKE STREET WEST, SUITE 400  
MONTRÉAL, QUÉBEC, CANADA H3A 2R2